

NOV 21 1957

MEMORANDUM FOR: Project Director

SUBJECT : Second Proposal for System VI

REFERENCE : First Proposal on System VI, dated 25 Oct 57

1. Several objections have been raised to the reference system proposal. Too much weight, not enough antenna space available and weight too far forward in the vehicle. Also, it has been said that space and antenna windows can be made available in the camera bay. [REDACTED] has suggested a weight reduction by time sharing in frequency as well as right-left time sharing. The writer says time sharing in frequency is not acceptable.

2. In order to meet nearly all the points above and provide high flexibility, the writer submits the following second proposal:

a. System VI to consist of two separate sub-systems, one in the nose and one in the equipment bay. Either may be carried alone and will weigh less than 40 lbs. each.

b. Each sub-system will be identical in its recorder, power supply, right-left time sharing switches and video amplifiers.

c. Any two sets of preamplifiers (or filters) and antennas can be used with either sub-system.

d. Antennas for 50-200, 200-1000, 1000-8000 and 8000-14,000 mc/s (of which the last three already exist) shall consist in the quantities of two each for every System VI.

e. Preamplifiers for 8-14 Mc shall be made by re-building System I X-band preamps as only one tube is now needed for System VI.

f. Preamplifiers for 50-200 mc/s shall be built by [REDACTED] with design currently used for 50-100 mc/s preamp for System I.

DOCUMENT NO. _____
NO CHANGE IN CLASS. ☒
☐ NEW CLASSIFICATION
CLASSIFICATION TO: S S
DATE: 8/1/82
AUTH: [REDACTED]
DATE: 8/1/82 REVIEWER: 064540

SYSTEM 6

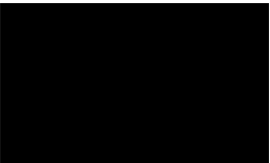
g. The R-W ferrite antenna for 50-200 mc/s has failed to give the results anticipated. A new antenna must be found for 50-200 mc/s. An  antenna is being investigated as a possible answer. What the antenna for this range shall be, will be determined after more study. The system must not be held up for this decision.

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h. Beam preamplifiers for regions between 1 and 8 Mc/s and 200-1000 mc/s preamplifier will be considered later.

i. The access hatches of the nose shall be fitted with windows and used for the second antenna pair in the nose subsystem.

j. A meeting with R-W engineers is necessary in order to establish technical details associated with the above system.

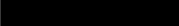

Acting RLINT Staff Officer

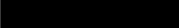
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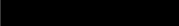
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